

KHARKHAROV, A.A.; TSVETKOVA, V.V.

Mechanism of the dyeing of polyvinyl alcohol fibers with dispersed dyes. Izv.vys.ucheb.zav.; tekhn.tekst.prom. no.2:112-118 '63. (MIRA 16:6)

1. Leningradskiy tekstil'nyy institut imeni S.M.Kirova.  
(Dyes and dyeing--Textile fibers, Synthetic)

BEL'TSOV, V.M.; KHARKHAROV, A.A.; YEREMEYeva, R.F.; ANAN'YEVA, Ye.B.;  
VASIL'YEVA, M.I.

Bleaching of cotton yarn and yarn products with sodium chloride.  
Tekst. prom. 23 no.9:70-73 S '63. (MIRA 16:10)

1. Sotrudniki Leningradskogo tekstil'nogo instituta imeni  
S.M. Kirova (LTI) (for Bel'tsov, Kharkharov). 2. Pryadil'no-ni-  
tochnyy kombinat imeni S.M. Kirova (for Yermeyeva). 3. Pryadil'no-  
nitochnyy kombinat "Krasnaya Nit'" (for Vasil'yeva).  
(Bleaching) (Yarn)

KOVZHIN, L.A.; KHARKHAROV, A.A.

Removal of colored admixtures from active vinyl sulfone dyes. Izv.  
vys.uchob.zav.; tekhn.tekst.prom. no.3:95-97 '63. (MIRA 16:9)

1. Leningradskiy tekstil'nyy institut imeni S.M.Kirova.  
(Dyes and dyeing—Chemistry)  
(Sulfones)

KHARKHAROV, A.A.; GURTOVENKO, S.I.; KALONTAROV, I.Ya.

Investigating the hydrolysis of dyes containing chlorine derivatives of heterocycles as a reactive system. Izv. vys. ucheb. zav.; tekhn. tekst. prom. no.4:99-102 '63.

(MIRA 16:11)

1. Leningradskiy tekstil'nyy institut imeni S.M. Kirova.

BEL'TSOV, V.M.; KHARKHAROV, A.A.

Effect of chlorine bleaching on the waxlike substances and  
lignin of vegetable fibers. Izv. vys. ucheb. zav.; tekhn.  
tekst. prom. no.1:97-102 '64. (MIRA 17:5)

L. Leningradskiy institut tekstil'noy i legkoy promyshlennosti  
imeni S.M. Kirova.

ZABASHTA, V.N.; YERSHOV, A.P.; KHARKHAROV, A.A.

Changes in the absorption spectrum related to the changes in  
the dye and fiber bond. Izv. vys. ucheb. zav.; tekhn. tekst.  
prom. no.6:98-102 '64. (MIRA 18:3)

1. Leningradskiy institut tekstil'noy i legkoy promyshlennosti  
imeni Kirova.

KOVZHEV, L.A.; KHARENKOV, A.A.

Selecting the efficient system for nylon dyeing with active  
vinylsulfonic dyes. Izv. vys. ucheb. zav.; tekhn. tekst. prom.  
no.4:105-110 '64. (MIRA 17:12)

1. Leningradskiy institut tekstil'noy i legkoj promyshlennosti  
im. S.M. Kirova.

STARIKOVICH, Ye.Ye., inzh.; KHARUKHAROV, A.A., prof.

Mechanism of the dyeing of polyamide fibers with metallized dispersion dyes. Tekst. prom. 24 no.7:64-66 JI '64. (MIRA 17:10)

1. Sotrudniki Leningradskogo instituta tekstil'noy i legkoy promyshlennosti imeni S.M. Kirova.



BEL'TSOV, V.M., starshiy prepodavatel'; KHABEDAROV, A.I., prof.

Chlorite bleaching of acetate knit fabrics. Tekst. prom. 24  
no.5:49-51 My '64 (MIRA 12:2)

1. Leningradskiy institut tekstil'noy i legkoj promyshlennosti  
Imeni S.M. Kirova.

BEL'TSOV, V.M.; KHARKHAROV, A.A.

Role of activators in the process of chlorite bleaching.

Izv. vys. ucheb. zav.; tekhn. tekst. prom. no.2:101-107

'65.

(MIRA 18:5)

1. Leningradskiy institut tekstil'noy i legkoy promyshlennosti  
imeni Kirova.

KHAPKHAPOV, A.A., doktor Khim.nauk, prof. FALCHIKOV, I.Ya., kandi.tekhn.  
Isk., starshiy nauchnyy sotrudnik, GLUSHKIN, M.M.: ARTAMONOVA, Z.I.

Use of active disulforic acid for dyeing knit nylon fabrics.  
Tekst.prom. 25 no.1263-66 za '69. (MIRA 18:7)

1. Voenigriiskiy Institut tekstil'nykh i legkoy promyshlennosti  
Imeni S.M.Kirova (for Yablukharov). 2. Institut khimii  
Tadzhikskoy SSR (for Kalent'ev). 3. Leningradskiy khimicheskoy  
laboratoriyey chulochno-trikotazhnyy fabrika "Vrasnaya zhnyazya"  
Soyeta narodnogo khozyaystva Leningradskogo ekonomicheskogo  
rayona (for Goltzman). 4. Khimicheskaya laboratoriya chulochno-  
trikotazhnyy fabrika "Krasnaya zhnyazya" Soyeta narodnogo khozyaystva  
Leningradskogo ekonomicheskogo rayona (for Artamonova).

LEBEXHAROV, I.A.; SHOTOVINKO, I. .

Use of catalysts in the dyeing of nylon fibers with active dyes.  
Diz. i sp. ucheb. zav.; tekhn. tekst. prom. no. 2: 98-103 1968.

(MIRA 1968)

Leningradskiy institut tekstil'noy i legkovy promyshlennosti.  
Imen' A. Rava.

ARESTOVA, G.A., aspirant; KHARKHAROV, A.A., prof.

Dyeing of polyacrylonitrile fibers with azo dyes forming on the  
fiber. Tekst.prom. 25 no.2:63-65 F '65. (MIRA 18:4)

1. Sotrudniki Leningradskogo instituta tekstil'noy i legkoy  
promyshlennosti.

KHARKHAROV, A.A., prof.; TSVETKOVA, V.V., nauchnyy sotrudnik

Dyeing of "vinol" blended with cellulose fibers. Tekst. prom.  
25 no.4:49-51 Ap '65. (MIRA 18:5)

1. Leningradskiy institut tekstil'noy i legkoy promyshlennosti.

STARIKOVICH, Ye.Ye., ispolnyayushchiy obyazannosti dotsenta: KHARKHAROV,  
A.A. prof.

Use of type "1:2" acid metallized dyes in dyeing polyamide  
fibers. Tekst. prom. 25 no.9:58-60 S '65. (MIRA 18:10)

1. Leningradskiy institut tekstil'noy i legkoy promyshlennosti  
imeni S.M. Kirova.

KHARKHAROV, A.A.; ARRESTOVA, G.A.

Thermodynamic analysis of the process of azo arine dye taking-out  
by polyacrylonitrile fibers. Izv. vys. shkol. sav.; tekhn. tekst.  
prom. no.1:92-97 '65. (MIRA 18:5)

1. Leningradskiy institut tekstil'noy i legkoj promyshlennosti  
imeni Kirova.



KHARKHAROV, A.A., prof.; YERSHOV, A.P., dotsent

Colorists of finishing factories. Tekst. prom. 25 no.12:73-75  
D '65. (MIRA 19:1)

1. Sotrudniki Leningradskogo instituta tekstil'ncy i legkoy  
promyshlennosti imeni S.M. Kirova.

L 30712-66 EWT(m)/EWP(j)/T RM

ACC NR: AP5028991

(A)

SOURCE CODE: UR/0342/65/000/009/0058/0060

AUTHORS: Starikov, Ye. Ye. (Docent); Kharkharov, A. A. (Professor)

10  
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ORG: Leningrad Institute of the Textile and Light Industry imeni S. M. Kirov  
(Leningradskiy institut tekstil'noy i legkoy promyshlennosti)

TITLE: The dyeing of polyamide fibers with acidic metal-containing dyes of type 1:2

SOURCE: Tekstil'naya promyshlennost', no. 9, 1965, 58-60

TOPIC TAGS: dye chemical, polyamide, capron, polymer

ABSTRACT: The object of the investigation was the quantitative determination of the extent to which intermolecular forces and salt-forming or ionic forces participate in the fixation of metal-containing complexes 1:2 to a polyamide substrate. The experiments were carried out on a capron particle which contained 38 mg -eq of  $\text{NH}_2$  groups per kg of polyamide. The absorption of acid grey NSM dyestuff by acetylated and nonacetylated capron particles at pH 7.5 and 90C was determined. The experimental results are presented in graphs and tables (see Fig. 1). It is concluded that the fixation of metal-containing complex dyes of Card 1/2

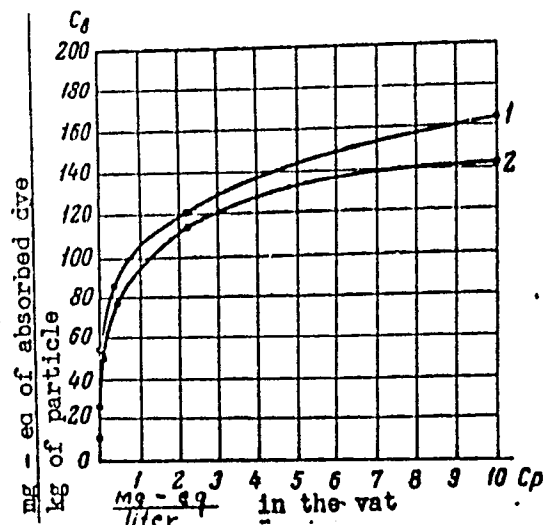
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L 30712-66

ACC NR: AP5028991

Fig. 1. Absorption of acid grey NSM by a capron particle.  
1 - nonacetylated;  
2 - acetylated.



the 1:2 type is not due to salt formation by the terminal amino groups, and it was found that the fixation of acid grey NSM dyestuff at a dye concentration of 0.115--11.48 mg -eq/liter does not exceed 23% of the total dye adhering to the fiber. Orig. art. has: 1 table and 2 graphs.

SUB CODE: 11/ SUBM DATE: none/ OTH REF: 002  
Card 2/2 LS

L 1003H-07

ACC NR: AP6009265

tested. Data is given to support the assumption that complex compounds are formed between the anion active dye and the cation active Alkamon. Orig. art. has: 2 figures, 3 tables and 4 formulas.

SUB CODE: 11, 13/ SUBM DATE: 05Nov64/ ORIG REF: 003/ OTH REF: 012

KHARKHAROV, A.A., prof.; POKROVSKAYA, G.A., starshiy nauchnyy sotrudnik

Studying the conditions of high-temperature continuous methods  
for dyeing knit fabrics made from polyester fibers. Tekst.  
prom. 24 no.9:49-52 S '64. (MIRA 17:11)

1. Leningradskiy institut tekstil'noy i legkoy promyshlennosti.

KHARKHARGV, A.A.; GURTOVENKO, S.I.

Studying the kinetics of the hydrolysis of chloropyrimidine  
dyes in alkali and acid media. Izv. vys. ucheb. zav.; tekhn.  
teks. prom. no.3:95-101 '64. (MIRA 17:10)

1. Leningradskiy institut tekstil'noy i legkoy promyshlennosti  
imeni Kirova.

KHARKHAROV, E.A., Cand Med Sci -- (diss) " Effect of medicinal  
therapy on blood coagulation indices in circulatory insufficiency."  
Mos, 1959. 14 pp (Min of Health USSR. Central Inst for the Advanced  
Training of Physicians). 200 copies (KL,37-59, 112)

81

KHARKHAROV, M.A.

Effect of strophanthin, euphyllin and certain diuretics on blood  
coagulation in patients with circulatory insufficiency. Terap.  
arkh. 31 no.4:46-52 Ap '59. (MIRA 14:5)

1. Iz 2-y kafedry terapii (zav. - prof. B.Ye.Votchhal) (TSentral'nogo  
instituta usovershenstvovaniya vrachey na baze bol'nitsy S.P.Botkina.  
(BLOOD--COAGULATION) (STROPHANTHIN)  
(AMINOPHYLLINE)

KHARKHAROV, M.A.

Method for determining the heparin time. Lab. delo 8 no.4:17-20  
Ap '62. (MIRA 15:5)

1. Kafedra terapii No.2 (zav. - prof.B.Ye. Votchak) Tsentral'nogo  
instituta usovershenstvovaniya vrachev, Moskva.  
(HEPARIN)



KHARKHAROV, M.S. (Moskva)

Comparative evaluation of dicoumarins and fenilin as anticoagulants.  
Klin.med.36 no.3:28-32 Mr '58. (MIRA 11:4)

1. Iz vtoroy kafedry terapii (zav. - prof. B.Ye.Votchal) Tsentral'-  
nogo instituta usovershenstvovaniya vrachey na baze bol'nitsy  
imeni Botkina.

(COUMARIN, related cpds.

bishydroxycoumarin ther., comparison with fenilin (Rus))

(ANTICOAGULANTS, ther. use

fenilin, comparison with bishydroxycoumarin (Rus))

ZAL'KIND, Yu.S.; Kharkharova, G.M.

Reaction of 2,5-diphenyl-3-hexyne-2,5-diol (symmetric dimethyl-diphenylbutynediol) with phenol in the presence of sulfanilic acid.  
Zhur.Obshechey Khim. 22, 1838-48 '52. (MLRA 5:11)  
(CA 47 no.15:7470 '53)

1. Lensovet Tech.Inst., Leningrad.

KHANKHAROVA, G. M.

On Some Recurrent Regularities in the Series of Ortho-Derivatives of Aniline and its Analogues, page 1663, Sbornik statey po obshchey khimii, (Collection of Papers on General Chemistry), Vol II, Moscow-Leningrad, 1953, pages 1680-1686.

U S S R

✓ some regularities in the system of arms control in  
- Europe and its analogs in the Atlantic area

1. The system of arms control in Europe is characterized by

the following features:

a) the system of arms control in Europe is based on the principle of

the balance of power;

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the balance of power;

1. HARKOVA, G. M.

Card 1.1 : Pub. 151 - 35/42

Authors : Moray-Koshits, B. A., and Kharkharova, G. M.

Title : Synthesis and properties of certain benzimidazole derivatives. Part 1.-  
Reaction of 1,2,4-triaminobenzene with carboxylic acids

Periodical : Khim. ob. khim. 24/9, 1651-1659, Sep 1954

Abstract : The reaction of 1,2,4-triaminobenzene with carboxylic acids and the  
properties of 5-amino derivatives of benzimidazole were investigated.  
The effect of hydrochloric acid concentration, temperature and heating  
period on the reaction of ortho-diamines with carboxylic acids in the  
presence of hydrochloric acid, is discussed. Optimum conditions favor-  
able for the synthesis of certain 5-amino-benzimidazole derivatives  
were established. Eight references: 6-USA and 1-German (1881-1973).  
Tables.

Institution : ...

Submitted : April 2, 1954

KHARKHAROVA, G. M.

USSR/Organic Chemistry - Theoretical and General Questions on Organic Chemistry,  
E-1

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61373

Author: Poray-Koshits, B. A., Kharkharova, G. M.

Institution: ~~Moscow~~ Leningradskiy Tekhnicheskii Institut Khimii Leningrad.

Title: Synthesis and Properties of Some Derivatives of Benzimidazole.  
Interaction of o-phenylene-diamine with Some Carboxylic Acids

Original

Periodical: Zh. obshch. khimii, 1955, 25, No 11, 2138-2143

Abstract: Investigated was the reactivity (R) of a number of carboxylic acids: anthranilic, p-aminobenzoic, m-aminobenzoic, nicotinic, acetic, hydrocinnamic, phenyl acetic, benzoic, p-chlorbenzoic, formic, mandelic and anisic, on their interaction with o-phenylenediamine (150°-160°, 5 hours) and the effects upon R of concentration of HCl. A criterion of R was the yield of the corresponding benzimidazole. Increase in concentration of HCl increases R up to a certain limit after which the R decreases.

Card 1/2

USSR/Organic Chemistry - Theoretical and General Questions on Organic Chemistry,  
E-1

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61373

Abstract: The reactivity of aromatic acids is lower than that of fatty and fatty-aromatic acids. In the case of amino-benzoic acids the R increases with increase of their dissociation constant.

Card 2/2

KHARKHAROVA, G. M.

USSR/Organic Chemistry. Synthetic Organic Chemistry.

E-2

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19211

Author : Kharkharova G. M.

Inst : ~~Kharkharova G. M.~~

Title : Synthesis and Properties of Benzimidazole. III. To the Problem of the Interaction of 1,2,4-triaminobenzene with Carbonic Acids.

Orig Pub: Zh. obshch. khimiyi, 1956, 26 No 6, 1713-1717

Abstract: The cause of the peculiar behavior of 1,2,4-triaminobenzene (I) at its condensation with carbonic acids (CA) in the presence of 30-35% HCl is the structure of its salt. Expressed and partially substantiated is the assumption, that in the salt formation of I take part only the aminogroups in the positions 2 and 4, forming I 2HCl (II). Owing to the action of two substitutes in the meta-position on the free H<sub>2</sub>N-group, is unable to

Card : 1/3

Card : 3/3



KHARKHAROV, A.A.; KHARKHAROVA, G.M.

Dyeing of synthetic fibers. Izv. vys. ucheb. zav.; tekhn. tekst.  
prom. no. 3:122-124 '58. (MIRA 11:7)

1. Leningradskiy tekstil'nyy institut.  
(Dyes and dyeing--Textile fibers, Synthetic)

5(3)

AUTHORS:

Kharkharov, A. A., Kharkharova, G. U.

SOV/79-29-9-51/76

TITLE:

Absorption Spectra and Structure of the Molecules. VI. Colors of the Hydrochloric Salts of the Arylhydrazones of 9-Acridyl Aldehyde Containing Residues of Condensed Cycles and Residues of Heterocycles

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 9, pp 3042-3048 (USSR)

ABSTRACT:

As was found already earlier (Ref 1) the color, i.e. the position of the main maximum and the intensity of the absorption of the organic compounds depends on the amount of the interacting  $\pi$ -electrons and on the total shift of the electron density in the molecule. These rules hold also for conjugate systems interrupted by an imine group and especially for the hydrochlorides of the arylhydrazones of 9-acridyl aldehyde investigated in the present paper. The introduction of the condensed cycles and residues of the heterocycles into this system instead of the phenyl residue confirms again the above mentioned rule (Figs 1-5, Table). Proceeding from the hydrochlorides of phenyl- and naphthyl hydrazones of 9-acridyl aldehyde it was

Card 1/3

Absorption Spectra and Structure of the Molecules. VI. Colors of the Hydrochloric Salts of the Arylhydrazones of 9-Acridyl Aldehyde Containing Residues of Condensed Cycles and Residues of Heterocycles

SOV/79-29-9-51/76

demonstrated that the multiplication of the interacting  $\pi$ -electrons in the conjugate systems interrupted by the imine group as well as in the normal conjugate systems is accompanied by an intensification of color. On the basis of the investigation of the hydrochlorides of phenyl-, naphthyl-, acenaphth-thenyl-, and carbazolyl hydrazones of 9-acridyl aldehyde it was found that the increase of the total shift of the electron density in the molecule from the radical R to the acridinium nitrogen  $H-N^+$  is accompanied by a further intensification of color. Proceeding from the hydrochlorides of phenyl-, benzimidazolyl anthraquinonyl- and other hydrazones of 9-acridyl aldehyde it was shown that the bathochromic effect of the multiplication of interacting  $\pi$ -electrons may be suppressed by the hypsochromic influence of an electrophilic radical viz under the reduction of the total shift of the electron density in the molecule; in the given case, from the radical to the acridinium nitrogen. The change in the radical structure which is connected with the imine group in the hydrochloric salts of the hydrazones of 9-acridyl aldehyde changes only little the

Card 2/3

SOV/79-29-9-51/76

Absorption Spectra and Structure of the Molecules. VI. Colors of the Hydrochloric Salts of the Arylhydrazones of 9-Acridyl Aldehyde Containing Residues of Condensed Cycles and Residues of Heterocycles

total shape of the curve, the position and the short-wave maxima and the relative distribution of the intensity of the absorption bands. The structure of the dyes obtained was confirmed by the similarity of their spectral curves with those of the phenyl hydrazones of 9-acridyl aldehyde, which had been accurately investigated already earlier, and by elementary analysis. There are 5 figures, 1 table, and 5 Soviet references.

ASSOCIATION: Leningradskiy tekstil'nyy institut (Leningrad Textile Institute)

SUBMITTED: January 12, 1958

Card 3/3

KHROBOSTOV, S.N.; kand.tekhn.nauk; KHARKHURIM, Sh.Kh., inzh.

Effect on soils on the traction power of tractors. Mekh. i elek.  
sots. sel'khoz. 19 no.1:22-24, '61. (MIRA 14:3)

1. Belorusskiy institut mekhanizatsii sel'skogo khozyaystva.  
(Tractors) (Soils)

USSR		V
Category=	Pharmacology and Toxicology. Chemotherapeutic Preparations. Antibiotics	
Abs. Jour.	Ref Zhur-Biol, No 13, 1958, No 61530	
Author	Puchkova, T. I.; Kharkhina, Z. D.	
Institut.	Rostov-on-Don State Scientific Research Anti-*	
Title	Therapeutic Action of Antibiotics and Chemotherapeutic Preparations upon Experimental Cholera in Rabbits	
Orig. Pub.	Tr. Rostovsk. n/D gos. n.-i. protivochumn. in-ta, 1956, 10, 234-253	
Abstract	<p>The introduction of a culture of virulent cholera vibrios (100 million bacteria) directly into the gall bladder of rabbits resulted in a prolonged infectious process. Some of the rabbits were treated immediately after infection, others eight days later (after appearance of agglutinins in the blood stream). Synthomycin [chloramphenicol], Disulforadin [1,4,4'-H-tri-</p> <p>* Plague Institute</p>	
Card:	1/3	
V - 31		

S/182/60/000/011/003/016  
A161/A029

**AUTHORS:** Shifrin, M.Yu., Kovalenko, Yu.Ye., Kolesnik, B.P., Polyakova, N.K., Kharkhorin, A.M.

**TITLE:** Development of Technology for Manufacture of Hollow Axles

**PERIODICAL:** Kuznechno-shtampovoye proizvodstvo, 1960, No. 11, pp.11-15

text; The problem of hollow axles for rolling stock on railroads could not be solved up to now. The authors have suggested to manufacture hollow axles from hollow rolled blanks and the Uralvagonzavod plant has developed axle designs in cooperation with the Ukrainskiy nauchno-issledovatel'skiy trubnyy institut (Ukrainian Scientific Tube Research Institute) (Fig. 1, axle for plain bearings, Fig. 2, for roller bearings). Experiments were carried out with billets rolled in an automatic tube rolling mill from "45" steel per GOST 1050-57 (GOST 1050-57) standard of the following composition: (%) 0.44 C; 0.25 Si; 0.28 S; 0.021 P; 0.13 Cr. Blanks of 230 mm diameter were pierced in a piercing mill, rolled in an automatic "220" or "400" mill with three passes, then reheated and forged on the ends in an especially designed three-impression die (Fig. 4), or in

Card 1/3

S/182/60/000/011/003/016  
A161/A029

# Development of Technology for Manufacture of Hollow Axles

a single-impression die (Fig. 5) for plain or roller bearings, respectively (Fig. 7 and 8). Ends were forged with a mandrel to maintain the hole in the axle trunnions. The axle wall thickness was uneven on account of the twisting of the metal in the piercing process, but this helical line of higher or lower wall thickness did not disbalance the entire axle too much. As wall unevenness can increase on account of buckling of rough axles, straightening of the rough rolled axle must be made obligatory in the manufacturing process. The axles were normalized in a continuous furnace with  $840 \pm 100^\circ\text{C}$  for 5 h 30 min and cooled in the air. The macrostructure of the trunnions metal was dense and sound with fibers following the axle out-towards the inner surface. The mechanical properties were above the standard requirements and partly even higher than the mechanical properties of solid axles. The weight of the axles varied between 328 and 348 kg compared with 428 kg of a solid standard axle. When techniques will be improved, the weight of the hollow axle for roller bearings may be further reduced to

Card 2/3



S/182/60/000/011/003/016  
A161/4022

Development of Technology for Manufacture of Hollow Axles

310-318 kg. The conclusion is drawn that manufacture of hollow axles from rolled blanks by rolling and subsequent forging of the ends is feasible. Fatigue tests of hollow axles are necessary, but a rolling shop project for manufacturing hollow axles may be developed without waiting for the test results, for hollow axle blanks can be produced by existing equipment. The recommended production equipment includes a machine for making hollow blanks, a three-high helical cross rolling mill ("stan poperechno-vintovoy prokatki") and hydraulic presses for forging the axle ends.

Card 3/3

KHARKHURIN, V.S., inzh.

Constructing a 220 kv electric transmission line. Nov.  
tekh.mont.i spets.rab.v stroi. 21 no.12:8-11 D '59.  
(MIRA 13:3)

1. Trast Savsapelektromontash.  
(Electric lines--Overhead)

EXCERPTA MEDICA Soc 5 Vol.11/6 Pathology June 58

1639. PATHOLOGICAL CHANGES IN THE LUNGS, CAUSED BY INSPIRATION OF HOT AIR (Russian text) - Kharkhurim I. M. and Vigalok S. G. ARKH. PATOL. 1957, 19/8 (29-31) Illus. 2

Twenty-seven dogs were used in the following experiments: air heated to 130-135°C. was introduced through a tracheotomy opening under slight pressure for three to four minutes; the animals were killed after intervals of from 5 minutes to 14 days. Circulatory disturbances appeared first as apoplectiform foci in the lungs with perifocal oedema; bronchial spasms with atelectases and acute emphysema were also to be found. After 3-7 days, micro-focal pneumonia and a proliferating endovasculitis and perivasculitis developed. Later, desquamative bronchitis and secondary, confluent haemorrhagic-purulent pneumonia were observed. In the rare cases which developed no pneumonia reparative changes appeared after 12 to 14 days.

Brandt - Berlin (V, 15, 17)

USSR/Human and Animal Morphology - Respiratory System.

3

Abs Jour : Ref Zhur Biol., No 5, 1959, 21473

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000721820014-

Author : Kharkhurim, I.M., Vigalok, S.G.

Inst : -

Title : The Problem of Pathological Changes in the Lungs During the Inhalation of Hot Air (Experimental-Morphological Investigation)

Orig Pub : Arkhiv. patologii, 1957, No 8, 29-31

Abstract : No abstract.

~~KHARKHURIM, Ya.~~ inzh.-podpolkovnik; SHVEBIO, A., inzh.-polkovnik; REVVVA, P.,  
inzh.-kapitan; VEREVKIN, I., kapitan; AFONIN, B., inzh.-kapitan.

Training of repairmen. Tankist no.1:22-25 Ja '58. (MIRA 11:3)  
(Tanks (Military science)--Maintenance and repair)

KHARKHURIN, V.S.; RYABUSHKIN, V.F.

Using the permanent electric supply source of the building under construction for the construction work. Stroi.prom. 33 no.12:  
37 D '55. (MLRA 9:3)

1. Yuzhelektromontazh.  
(Building) (Electric power distribution)

KHARKHURIN, V.S., inzhener.

Installing electrical equipment in metallurgical plants.  
Prom.energ. 12 no.1:22-26 Ja '57.

(MLBA 10:2)

1. Elektromontazhnyy trest Severno-zapadnogo rayona Ministerstva  
stroitel'stva predpriyatiy metallurgicheskoy i khimicheskoy  
promyshlennosti.

(Metallurgical plants--Electric equipment)

KHARKHUTA, A.F.

Surgical treatment of varicose veins of the lower extremities.  
Khirurgia 35 no. 5:93-97 My '59. (MIRA 13:10)

1. Iz kliniki fakul'tetskoy khirurgii lechebnogo fakul'teta  
(zav. kafedroy - prof. G.G. Karavanov) L'vovskogo meditsinskogo  
instituta. (dir. - prof. L.N. Kuzmenko).  
(EXTREMITIES, LOWER—SURGERY) (VARIX)

KHARKHUTA, A.F. (L'vov)

Significance of venography in varicose veins of the lower  
extremities. Eksp.khir. 4 no.3:43-44 My-Je '59.

(MIRA 12:8)

(VARICOSE VEINS, diag.

leg, venography (Rus))

(ANGIOGRAPHY

venography in varicose veins of leg (Rus))



KHARKHUTA, A.F.

Venous pressure and the blood circulation rate in varicose veins of the lower extremities. Vrach.delo no.8:839-840 Ag '59. (MIRA 12:12)

1. Klinika fakul'tetskoy khirurgii (zav. - prof. G.G. Karavanov)  
L'vovskogo meditsinskogo instituta.  
(BLOOD--CIRCULATION) (EXTREMITIES, LOWER--DISEASES)

KHARKHUTA, A. F., CAND MED SCI, "SURGICAL TREATMENT  
OF VARICOSE VEINS OF THE LOWER EXTREMITIES." CHERNOVR8Y,  
1960. (CHERNOVTSY STATE MED INST). (KL, 2-61, 220).

-294-

YESIPOVA, I.K., prof.; NOVIKOVA, T.K.; KHARKHUTA, A.F.

Pathological anatomy and histogenesis of changes in the veins of the  
lower extremities in varix. Vop. pat. i reg. org. krov. i dykh. no.1:  
111-120 '61.  
(MIRA 18:7)

KHARKHUTA, A.F.

Effectiveness of surgical treatment of varicose veins of the  
lower extremities from the point of view of remote results.  
Khirurgiia 37 no.5:38-42 My '61. (MIRA 14:5)

1. Iz II khirurgicheskogo otdeleniya (zav. - prof. G.G. Karavanov)  
L'vovskoy oblastnoy klinicheskoy bol'nitsy (glavnyy vrach N.I.  
Besedin).

(VARIX)

(LEG---BLOOD SUPPLY)

KHARKHUTA, A.F.; BUTEYKO, K.P.

Method for venous catheterization in the examination of venous hemodynamics in the lower extremities in clinical practice.  
Eksper. khir. i anest. 9 no.5:55-58 S-0 '64.

(MIRA 18:11)

1. Institut eksperimental'noy biologii i meditsiny (direktor - prof. Ye.N.Meshalkin) sibirskogo otdeleniya AN SSSR, Novosibirsk.

KHARKHUTA, N.Ya., kandidat tekhnicheskikh nauk.

Optimum amplitude of vibrations for surface vibrators. Mekh.stroi.  
4 no.9:10-11 S '47. (MLRA 9:2)

1.Lenfilial Dorozhnogo nauchno-issledovatel'skogo instituta.  
(Vibration)

1. BORODACHEV, I. P. - KHARKHUTA, N. Ya. - VASIL'YEV, A. A., ENG.
2. USSR (600)
4. Automobiles - Trailers
7. Cart on D-263 rubber tires. Mekh. strol. 9 no. 11, 1952
  
  
  
  
  
  
  
  
  
  
9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

KHARKHUTA, N. YA.

Machines for firming soils; theory, calculations and designs. Leningrad, Gos. nauchno-  
tekhn. izd vo mashinostroit. i sud-stroit. lit-ry Leningradskoe otd-nie 1953. 163  
p. (54-37700)

TA715.K45



KHARKHUTA, N.Ya., kandidat tekhnicheskikh nauk; VASIL'YEV, Yu.M., inzhener

Types and parameters for soil compaction machines used in winter.

Mekh.stroi.12 no.11:15-19 N'55.

(MLRA 9:1)

(Soil stabilization--Cold weather conditions)

VASIL'YEV, Yu.M., inzhener; KHARKHUTA, N.Ya., kandidat tekhnicheskikh nauk.

Control of soil solidification in the field. Avt. dor. 19 no.6:  
4-6 Jo '56. (MLRA 9:9)

(Soil stabilization)

KHARKHUTA, N.Ya., kandidat tekhnicheskikh nauk; VASIL'YEV, Yu.M., inzhener.

Building embankments in winter. Avt.dor. 19 no.9:4-6 S '56.

(MLRA 9:11)

(Road construction--Cold weather conditions)

KHARKHUTA, N.Ya., kand.tekhn.nauk; VASIL'YEV, Yu.M., inzh.

Effect of soil compactness on soil stability. Avt.dor. 20 no.12:22-23  
D '57. (MIRA 12:4)

(Soil mechanics)

KHARKHUTA, Nikolay Yakovlevich; VASIL'YEV, Yuriy Mikhaylovich; OKHRIMENKO,  
Regina Kirillovna; YEGOZOV, V.P., red.; LAKHMAN, P.Ye., tekhn.red.

[Compaction of earth for road fills] Uplotnenie gruntov dorozhnykh  
nasypei. Moskva, Nauchno-tekhn.izd-vo M-va avtomobil'nogo transp.  
i shosseinykh dorog RSFSR, 1958. 142 p. (MIRA 12:4)  
(Road construction)

KHARKHUTA N.Ya., kand. tekhn. nauk.

Selecting basic parameters for operating mechanisms in ramming  
machines used in stabilizing soils. Stroi. i dor. mashinostr. 3  
no.1:20-23 Ja '58. (MIRA 11:1)  
(Road machinery) (Soil stabilization)

KHARKHUTA, N.Ya., kand. tekhn. nauk

Effect of pressure in roller tires on the compaction of soil.  
Stroi. i dor. mashinostr. 4 no.11:23-25 N '59 (MIRA 13:3)  
(Road rollers) (Soil stabilization)

XHARKHUTA, N.Ya., kand, tekhn. nauk

Most useful road machinery for soil compaction. Avt. dor.  
22 no. 11:9-10 N '59. (MIRA 13:2)  
(Road machinery)



· KHARKHUTA, N.Ya.; VASIL'YEV, Yu.M.

Strength of roadbeds subjected to the effect of moisture. Avt.  
dor. 22 [i.e.23] no.9:8-11 3 '60. (MIRA 13:9)  
(Soil moisture) (Road construction)

KHARKHUTA, N. Ya., kand.tekhn.nauk; VASIL'YEV, Yu.M., kand.tekhn.nauk

Wrong recommendations. Avt. dor. 23 no.8:31-32 Ag '60.

(MIRA 13:8)

(Road construction) (Bridge construction)

KHARKHUTA, N.Ya.; VASIL'YEV, Yu.M.

Certain regularities in the swelling of clay soils. Inzh.-fiz.zhur.  
no.9:25-30 S '60. (MIRA 13:9)

1. Leningradskiy filial Vsesoyuznogo dorozhnogo nauchno-issledovatel'skogo instituta.

(Soil moisture)

KHARKHUTA, Nikolay Yakovlevich, kand. tekhn. nauk; IYEVLEV, Vladimir  
Mikhailovich, inzh.; DEBERDEYEV, B.S., red.; NIKOLAYEVA, L.N.,  
tekhn. red.

[Rheological properties of soils] Reologicheskie svoistva gruntov.  
Moskva, Nauchno-tekhn. izd-vo M-va avtomobil'nogo transp. i shossei-  
nykh dorog RSFSR, 1961. 61 p. (MIRA 14:11)  
(Rheology) (Soil physics)

VASIL'YEV, Yu.M., kand.tekhn.nauk; KHARKHUTA, N.Ya., kand.tekhn.nauk

Rollers on pneumatic tires. Stroi. i dor. mash. 7  
no.8:11-12 Ag '62. (MIRA 15:9)  
(Rollers (Earthwork))

KHARKHUTA, N.Ya.; VASIL'YEV, Yu.M.

Effect of the mineral composition of clay soils on their properties. Inzh.-fiz.zhur. 6 no.2:38-43 F '63. (MIRA 16:1)

1. Filial Vsesoyuznogo dorozhnogo nauchno-issledovatel'skogo instituta, Leningrad.

(Clay) (Soil physics)

KHARKHUTA, N.Ya., kand.tekhn.nauk

Results of studies made by the State All-Union Road Research  
Institute on soil compaction. Stroi. i dor. mash. 7 no.12:  
19-22 D '62. (MIRA 16:1)  
(Soil stabilization)

KHARKHUTA, N.Ya.; VASIL'YEV, Yu.M.

Using water-logged soils in the construction of embankments.  
Avt. dor. 26 no.1:25-26 Ja '63. (MIRA 16:6)

(Road construction)



KHARKHUTA, Nikolay Yakovlevich; VASIL'YEV, Yuriy Mikhaylovich;  
TOPOL'NITSKAYA, L.P.; red.; GALAKTIONOVA, Ye.N., tekhn.  
red.

[Firmness and compactness of the soils of roadbeds] Ustoi-  
chivost' i uplotnenie gruntov dorozhnykh nasypei. Moskva,  
Avtotransizdat, 1964. 215 p. (MIRA 17:3)

ZUBANOV, M.P.; KHARKHUT, N.Ya., doktor tekhn. nauk, red.

[Vibrators for compacting concrete mixes and soils]  
Vibratsionnye mashiny dlia uplotneniia betonnykh sme-  
sei i grunta. 2. izd. ispr. i dop. Moskva, Izd-vo  
"Mashinostroenie," 1964. 195 p. (MIRA 17:6)

FUZAKOV, N.A., doktor tekhn. nauk; KHARKHUTA, N.Ye., doktor tekhn. nauk; MOYILEV, Yu.L., kand. tekhn. nauk; VEYTMAN, M.I., kand. tekhn. nauk; MITASOV, I. V., inzh.; LEVITSKIY, Ye.F., inzh.; RUMANOV, A.Z., inzh.; Prinsipali uchastiye: KAZARNOVSKIY, V.D., kand. tekhn. nauk; DENISOV, Ye.M., inzh.; TOPOL'NITSKAYA, L.I., red.

[Instruction for building earth automobile roadbeds] Instruktsiya po sooruzheniyu zemliano go polotna avtomobil'nykh dorog (VSN 97-63). Moskva, Transport, 1964. 238 p.

(MIRA 17:11)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy proizvodstvennyy komitet po transportnomu stroitel'stvu.

KHARKHUTA, N.Ya.; IYEVLEV, V.M.; KAPUSTIN, M.I.

Frequencies of intensive thizotropic transformations of soils  
subjected to vibration. Trudy LPI no.236:99-102 '64.  
(MIRA 18:3)

KHARKHUTA, N.Ya.

Dynamic actions on soils and pavements. Avt.dor. 28 no.6:29 Ja '65.  
(MIRA 18:8)

KOLESNIK, A.S.; KHARKHUTA, T.I.

Before starting the summer work. Puti i put. khoz. no.4:4-6 Ap  
'59. (MIRA 13:3)

1. Nachal'nik sluzhby puti, zdaniy i sooruzheniy, g.Ufa (for Kolesnik).
  2. Nachal'nik tekhnicheskogo otdela sluzhby puti, zdaniy i sooruzheniy,  
g.Ufa (for Kharkhuta).
- (Railroads--Maintenance and repair)

GRIGORIADIS, K.P., inzh. (Stantsiya Bataysk, "Severo-Kavkazskoy dorogi")  
KHARKHUTA, T.I.

Our experience in the maintenance of cross switches. Put' 1 put.khoz.  
5 no.8:16 Ag '61. (MIRA 14:10)

(Railroads--Switches)

KHARKHUTA, T.I., inzh. (stantsiya Bataysk, Severo-Kavkazskoy dorogi)

Designing the superelevation of the outer rail according to the  
load characteristics. Put' i put.khoz. 6 no.3:29-30 Mr '62.  
(MIRA 15:3)

(Railroads--Rails)



SOV/97-59-1-3/18

AUTHORS: Krotovskiy, S.S., Candidate of Technical Sciences;  
Khar'kin, A.M., Engineer; Zadvin, M.V., Engineer and  
Korotkov, P.A., Engineer.

TITLE: Construction of Pre-stressed Reinforced Concrete Elements  
of a Ramp Serving a Blast Furnace (Opyt izgotovleniya  
predvaritel'no napryazhennykh zhelezobetonnykh elementov  
bunkernoy estakady domennoy pechi).

PERIODICAL: Beton i Zhelezobeton, 1959, Nr.1, pp.11-15 (USSR)

ABSTRACT: Various basic constructional elements of pre-tensioned  
reinforced concrete ramps serving blast furnaces (i.e. beams,  
frames carrying ore bunkers, railtrucks, and slabs) are  
described. The authors of this project are engineers  
Yu.I. Ukhina and A.Ya. Fridkin. Fig.1 shows cross section  
of the ramp supported at 4570 mm centres. The main  
frame is of 10.38 m span carrying ore bunkers and two  
railway trucks with a total loading of 500 t (see Fig.2).  
The cross-section of the frame is 440 x 2,300 mm, made  
from concrete mark 400 reinforced with 26 batches of high

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SOV/97-59-1-3/18

Construction of Pre-stressed Reinforced Concrete Elements of a Ramp  
Serving a Blast Furnace.

tensile reinforcement each containing 18 5 mm wires resisting temporary stresses up to 17,000 kg/cm<sup>2</sup>. Six batches of reinforcement are placed in the top zone and 20 batches in the bottom zone of the beam. Fig.3 illustrates beams carrying railway trucks. Technical advice during the erection of the above construction was given by the ASIA SSSR and Lenpromstroyproyekt. The concreting was carried out on open yards using two tower cranes of 3 t capacity and a bridge crane of 30 t capacity. Curved channels for batch reinforcement were formed by means of rubber tubes of 51 mm diameter. The straight channels were formed by means of steel tubes which during concreting were rotated round their axes every 20 minutes and were pulled out after 2 hours. Fig.4 illustrates the formwork and the reinforcement of the frame. In 1 m<sup>3</sup> of concrete the following ingredients were used: 570 kg of cement mark 500; 640 kg of sand; 1,220 kg of coarse aggregate up to 25 mm in size, and 200 l. of water. The water/cement ratio was 0.35.

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The concrete was delivered in tipping bunkers and consolidated

SOV/97-59-1-3/18

Construction of Pre-stressed Reinforced Concrete Elements of a Ramp  
Serving a Blast Furnace.

by vibrators I-21, I-50 and I-80. The curing lasted 36 hours at a temperature of 80°C. After that the strength of the concrete was great enough to tension the reinforcement, i.e. 360 kg/cm<sup>2</sup>. Fig.5 illustrates the testing of anchoring by jack. A detailed description of tensioning and anchoring problems is given. The cement grout for filling the channels consisted of 2.5 parts of cement mark 500 and 1 part water. The injecting of the grout was carried out by means of a hand-operated suction pump, and when the channel was completely filled a pressure of 2-3 atm was applied. During production of these precast pre-tensioned units various improvements and modifications were found to be necessary. There are 7 figures.

Card 3/3

KHARKIN, S. E.

Nezatukhailushchie kolebania [Continuous oscillations]. Moskva,  
Gosenergoizdat, 1953. 128 p.

SO: Monthly List of Russian Accessions, Vol. 6 No. 9 December 1953

**"APPROVED FOR RELEASE: 09/17/2001**

**CIA-RDP86-00513R000721820014-6**

**APPROVED FOR RELEASE: 09/17/2001**

**CIA-RDP86-00513R000721820014-6"**

AID P -3770

Subject : USSR/Electricity

Card 1/2 Pub. 26 - 12/29

Authors : Livshits, E. M., Ponizovskiy, M. M., and Kharkin,  
Yu. A., Engs.

Title : Air ~~indraft~~ in convection shafts of boiler aggregates  
(Discussion)

Periodical : Elek. sta., 10, 38-44, 0 1955

Abstract : The Editors in a note preceeding the article explain that the problem presented was subject to detailed discussion because of its importance. They ask for further comments. The authors present a study of losses occuring in the heat-absorbing surfaces of boiler aggregates and attempt to define conditions of optimum efficiency. In particular, they try to find ways to avoid air indrafts which cause considerable heat losses in the several heat-ducts of the aggregates. They recommend the tightest possible construction of all the duct work and piping, with low frictional resistance

AID P - 3770

. Elek. sta., 10, 38-44, 0 1955

Card 2/2      Pub. 26 - 12/29

and good heat insulation. One photograph, 1 diagram,  
and 18 drawings.

Institution : None

Submitted : No date

MARSHAK, Yu.L., inzh.; SIZIN, P.R., inzh.; SOLOV'YEV, A.M., inzh.; PSHENKO,  
V.A., inzh.; KHAR'KIN, Yu.A., inzh.

Adjustment and operation of the TP-230-6 boiler with vertical cyclone  
preliminary furnaces operating on anthracite culm. Elek. sta. 34 no.  
6:17-22 Jo '63. (MIRA 16:9)

(Boilers) (Electric power plants)



S/114/60/000/001/002/008  
E194/E455

AUTHORS: Parshin, A.A., Engineer, Reznik, V.I., Engineer and  
Kharkin, Yu.A., Engineer

TITLE: A High-Output Natural-Gas Fuel Oil Fired Boiler for  
Outdoor Installation

PERIODICAL: Energomashinostroyeniye, 1960, No.1, pp.11-16

TEXT: This article describes the first Soviet boiler type  
TGM-94 (TGM-94) which was built by the Taganrog Boiler Works  
with output of 500 tons per hour at a steam pressure of 140 kg/cm<sup>2</sup>  
with main and reheat temperature of 570°C. The boiler will burn  
natural gas or fuel oil and will be installed in the open air.  
The installation site is in an earthquake region near the sea and  
is subject to strong winds carrying dust and salt spray. Also, the  
air temperature may fall to -5°C. It was accordingly important to  
be able to drain all parts of the boiler, including the super-  
heaters, in case of prolonged shutdown during frosty weather.  
Because the boiler is to be installed outdoors, the frame is more  
complicated and heavier than it would otherwise have been. The  
arrangement of the boiler is shown diagrammatically in Fig.1.  
It follows the usual inverted-U arrangement but with the special  
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E194/E455

A High-Output Natural-Gas Fuel-Oil Fired Boiler for Outdoor Installation

features that the air heaters are brought out to the front of the boiler, the turbo-generator being behind it. This shortens the main steam pipes, and a certain lengthening in the gasways, which are arranged under the boiler, is compensated by simplification of the hot-air ducting system. The use of a radiation superheater on the front wall of the boiler simplifies the primary steam circuit. Also, it allows a smaller total superheater surface by making more effective use of the radiation surfaces as compared with a convective arrangement, when burning fuel oil. All the convective superheaters and economizers are in a common vertical gasway and are made in horizontal coils with honeycomb arrangement, accordingly, they can easily be drained. Moreover, shot-blast cleaning can be used, so that the standard factor for allowing for contamination of these parts may be reduced by 30 to 50%. As it was considered inadvisable to burn the gas with a luminous flame, the burners are adjusted to give a non-luminous flame. The main components of the boiler are then

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described in turn. The dimensions of the furnace chamber in plan are 6080 x 6074 mm and the height is about 20 m. At 500 tons per hour, the apparent thermal loading of the furnace volume is  $189 \times 10^3$  kcal/m<sup>3</sup> hour burning fuel oil and  $190 \times 10^3$  kcal/m<sup>3</sup> hour burning gas. The arrangement of the heating tubes is described. The gas fuel-oil burners, intended for separate combustion of gas and fuel oil are next described. On the front wall there are 28 burners arranged in 4 belts; 21 burners are in use when steaming at 500 tons per hour. The three upper belts of burners will mainly work on fuel oil and the lower belts mainly on gas. The boiler lining is also discussed. The superheaters are then described. The arrangement was governed by two main considerations. The first was the need to obtain rated steam conditions for both primary and reheat steam when burning gas or fuel oil, which have different flame radiation properties and differ in the contamination of convective heating surfaces. The second was the tendency to reduce the convective heating surfaces arranged in the downflow shaft. Extensive use is made

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of steel 12XMF (12KhMF) in the tubes but some of the superheater tubes are made of austenitic steel grade 1X18N12T (1Kh18N12T) which it is proposed to replace later by pearlitic steel grade X2MFCP (Kh2MFSR). This boiler is the first made by the Taganrog Boiler Works with the inverted-U arrangement and reheat. The greatly reduced width of the boiler as compared with the T arrangement complicated the design of the purely convective reheat superheater; the construction adopted is briefly described. The primary superheater has an injection de-superheater in the form of a Venturi tube with a diffuser angle of about 3°. Condensate is introduced into the narrow section of the tube through a radial hole, as sketched in Fig.5. The water economizer is described, also the water circulation system and regenerative water heaters. The boiler had special condensers to the design of Professor Doležal, to provide water for injecting into the superheated steam to control the temperature. When burning gas, the quantity of condensate required is 65 tons per hour. The installation has four condensers, located two metres above the normal level in the Card 4/6

S/114/60/000/001/002/008  
E194/E455

A High-Output Natural-Gas Fuel-Oil Fired Boiler for Outdoor Installation

drum. Each condenser receives steam from the drum; it is cooled by feed water received from the economizer at a temperature of about 240°C. The superheated steam temperature control arrangements are somewhat special because the properties of gas and fuel-oil are so different. Injection cannot be used in the reheater. The main control of the primary superheat temperature is by double injection of condensate produced in the boiler, as described above, and by injection of condensate from outside the boiler to prevent excessive reheat. Superheat is controlled by shifting the flame by adjustment of the burners. Flue gases are recirculated mainly to control reheat and as a reserve. Steam purification arrangements inside the drum are briefly described. Special features of the boiler resulting from its being installed outdoors are summarized. The main requirement is to provide adequate drainage in case of prolonged shutdown in frosty weather. Various services which may be cold whilst the boiler is operating, and pipes that cannot be drained during shutdown, must, as far as possible, be thermally insulated and

Card 5/6

S/114/60/000/001/002/008  
E194/E455

A High-Output Natural-Gas Fuel-Oil Fired Boiler for Outdoor Installation

provided with electric heating. The staff need not be much exposed to the open air because operation of the boiler is largely automatic and remote control is provided. The automatic control and protective arrangements are briefly described. The automatic control stabilizes the primary steam pressure beyond the boiler and the ratio of heat raised in the boiler to the amount of air delivered to the furnace. The boiler is protected against sudden loss of load, throwing of water into the superheaters, overflow or loss of water from the drum and failure of tubes. It has shot-blasting equipment to keep the convective heating surfaces clean. The main characteristics of boilers type TGM-94 are given in Table 1, for both gas and fuel-oil, and the weight of the components of boilers TP-90 (TP-90) and TGM-94 are compared in Table 2. There are 8 figures, 2 tables and 2 Soviet references.

Card 6/6

ZALKIND, Ye.M., inzh.; PAPER, I.S., inzh.; KHARKIN, Yu.A., inzh.

Rebuilding of the framework of a steam boiler. Elek. sta.  
34 no.3:39-43 Mr '63. (MIRA 16:3)

(Boilers)

- [illegible]



KHARKINA, G. A.

PA 192T15

USSR/Biology (Agriculture) - Sep/Oct 51  
Plant Diseases

"Comparative Effect of Phytoncides From Garlic  
on Phytopathogenic Bacteria," G. A. Kharkina,  
Moscow Sta of Plant Protection, VIZR (All-Union  
Inst of Plant Protection)

"Mikrobiologiya" Vol XX, No 5, pp 434-437

All phytopathogenic bacteria investigated were  
found to be susceptible to the action of garlic  
and sativin phytoncides. They are more resist-  
ant to this action than bacteria pathogenic to

192T15

USSR/Biology (Agriculture) - Sep/Oct 51  
Plant Diseases (Contd)

humans and animals, however. Exptl results in-  
dicate the need of further work on the use of  
phytoncides in combating bacterial diseases of  
plants.

192T15

MEDVEDEV, K.P.; PETROPOL'SKAYA, V.M.; NIKITINA, K.A.; KHAR'KINA, L.M.

Polyatomic phenols obtained by high-temperature carbonization. Koks i  
khim. no.10:33-36 '62. (MIRA 16:9)

1. Ukrainskiy uglekhimicheskiy institut.  
(Phenols) (Coke industry—By-products)

L 18170-63 EWP(q)/BDS/EWT(m) AFFTC/ASD JD

ACCESSION NR: AP3004231

S/0032/63/029/007/0805/0805

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56

AUTHORS: Medvedev, K. P.; Khar'kina, I. M.; Petropol'skaya, V. M.; Nikitina, K. A.

TITLE: Accelerated method for determination of germanium in coal tar, heavy coal-tar products, and coal-tar pitch

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SOURCE: Zavodskaya laboratoriya, v. 29, no. 7, 1963, 805

TOPIC TAGS: coal tar, pitch, distillation, germanium

ABSTRACT: In the process of coal tar and coal tar pitch distillation practically all the germanium content is located in nonvolatile products and does not volatilize with the light tar fractions. Consequently, a simple, rapid method for germanium determination was developed--combustion of samples in porcelain dishes without recourse to an oxidizing agent. An aliquot of 1-3 gms of tar was placed in a porcelain dish, covered with a paper filter to prevent spattering, and heated on sand to remove the light volatile substances. Thereafter the dish was placed in a furnace at 550C until all the carbon had burned out. The residue

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was transferred to a distillation flask by means of 10 ml of 6-n hydrochloric acid, then the germanium was distilled out as germanium chloride. The germanium was determined in a photocolormeter in the form of a reaction compound with phenylfluorone. This method is nearly three times faster than the standard oxidation procedure, and the difference in yield by the two techniques does not exceed + - 10%, which is within the permissible limits of error.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy uglekhimicheskiy institut  
(Ukrainian Scientific Research Institute of Coal Chemistry)

SUBMITTED: 00

DATE ACQ: 02Aug63

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